

# Top Content, Top Context ...



Advertising in *The Catalyst Review*: What You Need to Know To Get Where You Want to Get



## Why Advertise with *The Catalyst Review* ...?

**QUALITY OUTREACH.** Your message reaches the target audience that matters most: The industry's most influential Catalyst Producers and Suppliers, top-level Process Technology Licensors and Major/Global End Users.

**ESTABLISHED READERSHIP.** As we approach four decades in the industry, our global audience of more than 17,000 readers comprises subscribers who have relied upon the advice of *The Catalyst Review* and parent company, TCGR, for decades.



*Pillars of the Catalysis Process Licensing Industries and End Users  
Have Been Subscribers for 25-Plus Years.*



# Who Advertises with *The Catalyst Review* ...?

**AI  
for  
CATALYSIS**  
*OVERCOMING DATA SCARCITY*

**WEBINAR**  
JUL 28th  
10am ET

REGISTER: <https://rebrand.ly/catalyst-review>

**CITRINE**  
INFORMATICS

## Technological Innovators

*"First off, huge thanks for the awesome job you did publishing the info about our webinar. Seriously, the outreach was beyond great. You totally knocked it out of the park!"*

## Event Organizers

  
MIDDLE EAST TECHNOLOGY FORUM FOR  
REFINING & PETROCHEMICALS  
16-18 May 2023  
The Address Dubai Marina Hotel, Dubai, UAE

Middle East's  
Premier Technical  
Downstream Event

SPONSORS:

Honeywell uop wood. GRACE  
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Dynamis  
SULZER  
TOPSOE

Be part of the most established, well-respected technical conference that has helped to shape the downstream industry in the Middle East for more than 13 years!

## Catalyst Licensors and Manufacturers

**CLARIANT**

**Big changes  
SOMETIMES START  
SMALL.**

CATALYST SOLUTIONS THAT DELIVER VALUE:  
CLARIANT CATALYSTS.  
Our products are small, but they deliver big value. Use our high-performance catalysts to make more of what you want and less of what you don't, all with less energy. We are ready for your big challenges.  
[WWW.CATALYSTS.CLARIANT.COM](http://WWW.CATALYSTS.CLARIANT.COM)

what is precious to you?

**The Catalyst Review  
provides targeted  
messaging to the  
industry's top catalyst  
producers and suppliers,  
C-Suite process technology  
licensors, and leading  
global end users.**



# What's Unique About *The Catalyst Review* ...?

**ENGAGEMENT.** Accessed by nearly 100% of our readership base, our digital platform represents a unique advertising opportunity.

**IMPRESSIONS.** The electronic edition of *The Catalyst Review* offers pop-ups, real-time animations, embedded promotional extras, and targeted creative enhancements that convert your ad into engaging content.

**RESULTS.** Repeated and extended viewings.

**CAPABILITIES.** Our team can create a custom animation to maximize readership engagement with your brand messaging.

## For example ...

*Original Graphic/  
Animation in support  
of “Olefin Metathesis  
for XXI Century  
Chemical Industry”  
webinar by Apeiron,  
June 2023*



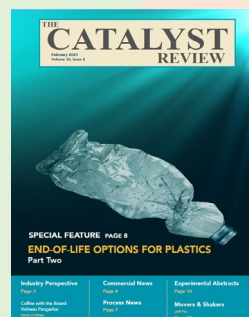
The graphic is a promotional banner for a webinar. On the left is a portrait of Prof. Dr. Karol Grela MAE, a man with glasses wearing a blue blazer over a patterned shirt. To his right, the text reads: **WEBINAR**, **OLEFIN METATHESIS FOR XXI CENTURY CHEMICAL INDUSTRY**, 13th of June, 15.00 (GMT) 16.00 (CET) 10.00 (ET), and Prof. Dr. Karol Grela MAE. Further right are the logos for 'SCIENTIFIC UPDATE' (a green hexagon) and 'Apeiron synthesis' (a molecular structure logo). The Apeiron logo includes the tagline 'Leading the way in metathesis'.

*Click the image to see animation...*

# 'For the Industry ...

Heavily read across the oil & gas conversion and chemical manufacturing sectors, ***The Catalyst Review*** is a pipeline to these decision-makers:

- ✓ Principal Scientist/Science Lead – Catalysis
- ✓ Global Bioprocess Catalysis & Circularity Manager
- ✓ CEO / CTO / CFO / CIO
- ✓ Chief Procurement Officer
- ✓ Head of R&D
- ✓ Regional Technology Manager, Refining Catalysts
- ✓ Process Technology Licensor
- ✓ Head of Product Line Life Science & Performance Catalysts
- ✓ Global Catalysis Leader
- ✓ Senior Research Scientist
- ✓ Global Development Manager
- ✓ Assorted Postdoctoral and Academic Appointees from Leading Global Technical Research Institutes



# ... By the Industry ...'

Our Scientific/Commercial content is planned, produced and administered with the guidance of subject matter experts.

Special Feature Topics, from Authors Who Are in a Position to Know, Include:

- ✓ Lignin Valorization
- ✓ Advanced Electrolysis Chemicals
- ✓ Catalysis on Confined Surfaces
- ✓ End-of-Life Options for Plastics
- ✓ Phthalate-Free Catalysts

In Addition, Each Issue Offers Hand-picked Content Pertaining to the Following:

- ✓ Industry Perspectives
- ✓ Commercial News – Process News
- ✓ Experimental Abstracts
- ✓ Movers & Shakers

Our network of Advisors, Collaborators and Consultants draws on TCGR's unique DIALOG GROUP®

## Content, Context and Vision Shaped By ...

TCGR partners with the industry's most accomplished and published experts.  
*The Catalyst Review's* Board of Advisors comprises the industry's most sought-after thought leaders and influencers, putting your message in stellar company.

## Top Honors – Top Institutions ...

Vishwas Pangarkar



**Fellow of The American  
Institute of Chemical  
Engineers (AIChE)**



Avelino Corma



**Recipient of European  
Inventor Award for  
Lifetime Achievement**

# Cross-Pollination

## Catalyst Review

contributors and advertisers benefit from exposure to our social media platform, increasing your reach to new contacts and connections.



Social Media Cross-Pollination can result in a considerable uptick in your analytics.

## Got a Press Release ...?

We spotlight our partners regularly in our Commercial and Process News departments.

**Catalyst Review** advertisers are also top of mind when our weekly bulletins in support of our Catalytic Advances Program (CAP) and Industrial Energy Transition and Decarbonization (IETD) Consortium go to press, raising the likelihood of exposure to multiple additional segments of our network.

### Movers & Shakers



**Deepak Pant, PhD**  
Senior Scientist, Sustainable Chemistry, Flemish Institute for Technological Research (VITO), Belgium



Deepak Pant holds a PhD in environmental biotechnology and has published 195 papers, 6 books, 6 patents, and 40 book chapters. In addition, he is the Editor of *Bioresour. Technology Reports* and an Editorial board member of *Bioresour. Technology*, *ACS Sustainable Chemistry & Engineering*, *Science and World Journal of Microbiology & Biotechnology*. He is a Fellow of the Royal Society of Chemistry (FRSC) and the Biotech Research Society (IBRS) and has participated in more than 25 projects, of which 14 are European (FP7/H2020/Horizon Europe) dealing with CO<sub>2</sub> conversion, electrode development, and resource recovery. Currently, Pant is working on electrocatalysis and resource recovery, specifically designing and optimizing electrochemical systems for CO<sub>2</sub> conversion and microbial electrosynthesis. Together with his team, he has developed and upscaled the production of gas diffusion electrodes (GDEs) for applications in microbial fuel cells as well as CO<sub>2</sub> electroreduction. He can be reached at [deepak.pant@vito.be](mailto:deepak.pant@vito.be).

**The Catalyst Review** asks Dr. Pant to share his views on current developments in (bio) electrocatalysis.

In recent years, catalysis has emerged as a technological choice for various environmental and energetic applications, including, but not limited to, resource recovery, energy production, electrocatalysis, and remediation. This pathway can be mediated either by a microorganism (biocatalysis), an electrode (electrocatalysis), or a combination of both (biobioelectrocatalysis). All three catalytic approaches have seen significant progress in the last decade, with several technologies at a high technology readiness level (TRL) and others entering the pilot and demonstration phase. Commercial interest in this field is evidenced by the public NASDAQ listing of companies operating in this field. Moreover, the recent emphasis President Joe Biden has placed on the biological production of fuels, chemicals, and plastics using living organisms coupled with his goal of producing at least 30% of chemicals and being able to replace more than 10% of plastics within the next two decades highlights the high expectations to be derived from biocatalysis. Some biocatalytic processes, such as fermentations and engineered organisms for producing value-added pharmaceuticals, are well established. Biocatalysis, however, has much untapped potential for "new-to-nature" reactions.

Biobioelectrocatalysis is a relatively new approach that relies on the ability of certain bacteria to accept electrons from an external electrode and convert CO<sub>2</sub> into fatty acids and alcohols. Just like electrocatalysis, such conversions can benefit from renewable electricity. However, microbial electrocatalysis research is limited to acetic acid production and still struggles with low production rates and non-selective conversion, resulting in a mix of carboxylic acids and alcohols. Since most of such conversions are mediated via hydrogen, another challenge is to provide or generate sufficient hydrogen for the electrodeless microorganism so that the primary CO<sub>2</sub> conversion does not become limiting. In this regard, we have demonstrated the production of alcohols using VITO-CO<sub>2</sub>H<sub>2</sub> electrodes with our industrial partner in India, where a pilot plant is currently operational. In a recently concluded project Bio-To-Fuel (Horizon 2020, European Commission), VITO developed a tubular water electrolysis cell for a microbial electrocatalysis system with low ohmic resistance.

The increasing access to renewable electric power has given a boost to electrocatalytic processes giving rise to several Power-to-X (PtX) routes from simple molecules like hydrogen, C<sub>1</sub> products derived from CO, such as CO, CH<sub>4</sub>, and formic acid; C<sub>2</sub> and multi-carbon products such as ethylene, ethanol, propanol and higher carboxylic acids and products from nitrogen electroreduction such as ammonia. The plethora of electrocatalysts developed in recent years has enabled electrochemical transformations with much higher selectivity and efficiency under milder conditions, allowing for highly difficult bond formation such as C-C, C-O, and C-N. However, much of this exciting science is still at the lab scale. Several of these reactions have not moved beyond the proof-of-concept because of challenges associated with upscaling and developing stable electrodes. Except for hydrogen electrolyzers, these reactions have often been demonstrated for short periods, thus raising concern regarding catalyst stability, which is critical for commercialization. To this end, we have developed and upscaled gas diffusion electrodes (GDEs) available as VITO-CO<sub>2</sub>H<sub>2</sub> and VITO-CO<sub>2</sub>LE with application in microbial fuel cells as well as membraneless CO<sub>2</sub> with enhanced interest for CO<sub>2</sub> electroreduction. At VITO, we have shown some of these Power-to-X technologies at pilot scale. In 2022 we built a 3 kW CO<sub>2</sub> electrolyzer which is currently being upscaled to 50 kW.

**Coming Soon – Topics Include:**

- Lignin Valorization
- Wastes-to-Energy Sorption – Part Two
- Nitrogen Catalysis
- Advanced Electrolysis Chemicals



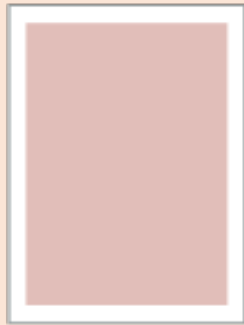
28 The Catalyst Review July 2023

You and 193 others

11 comments • 1 repost

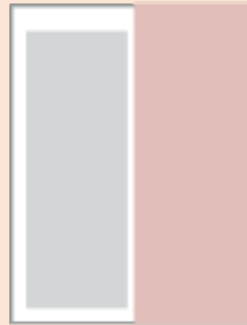
Like Comment Repost Send

# Print Specifications & Fee Schedule



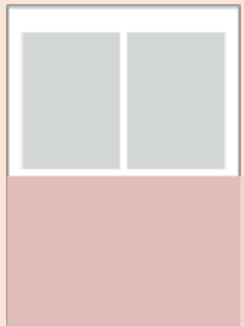
Full Size w/Bleed  
8.375"W x 11"H  
(214 mm x 281 mm)  
Final Trim  
7.875"W x 10.5"H  
(200 mm x 267 mm)  
Live Area  
7.375"W x 10"H  
(187 mm x 254 mm)

Full Page



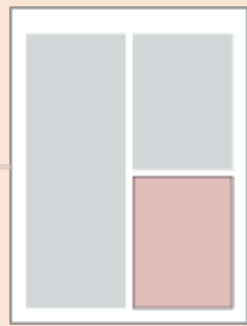
Bleed:  
4.25" W x 11" H  
(107.95 mm x 280 mm)  
Trim:  
3.75" W x 10.5" H  
(95.25 mm x 267 mm)  
Live Area:  
3.25" W x 10" H  
(82.55 mm x 254 mm)

1/2 Page Vert.



Bleed:  
8.375" W x 5.375" H  
(213 mm x 136.5 mm)  
Trim:  
7.875" W x 4.875" H  
(200 mm x 124 mm)  
Live Area:  
6.875" W x 4.375" H  
(175 mm x 111 mm)

1/2 Page Horiz.



1/4 Pg Vert.  
3.25"W x 4.375"H  
(83 mm x 111 mm)

**BORDERS:**  
1/4" page ads  
must have a  
border on all  
sides.

## Rates (in US Dollars):

### In Publication

(In Electronic & Print Formats)

Full Page	\$1400
2/3 Page	\$1000
1/2 Page	\$750
1/3 Page	\$500
1/4 Page	\$375

### Beyond:

(Electronic Enhancements)

Subscribers: Free  
Non-Subscribers: Add 10%

Sponsored content can take matters a step further. Inquire about the possibility of combining your ad with a technical article showcasing your company's achievements, as the parallel deliverables can strengthen your message considerably.

Combinations/multiple placement packages available; for information, contact Managing Editor Kevin O'Brien at [kobrien@catalystgrp.com](mailto:kobrien@catalystgrp.com).

*"I stand in wonder at the new format of  
The Catalyst Review. ... Well done."*

# Advertising in *The Catalyst Review* Offers:

- ✓ Targeted Messaging to the Industry's Top Catalyst Producers and Suppliers, C-Suite Process Technology Licensors, and Leading Global End Users.
- ✓ Global Subscriber Base Comprising More Than 17,000 Authorized Recipients, Backed By TCGR's 35-Plus Year Tradition.
- ✓ Engaging, Eye-Catching Graphics and Animations that Lend Themselves to Multiple Viewings from our Digital Readership.
- ✓ Creative Consultancy Can Yield Unique GIFs and MP4 Videos That Can Be Cross-Pollinated in Your Social Media Channels!



Don't Miss Out on Your Fair Share of  
the \$35 Billion Catalysis Industry!

Contact **TCR** Managing Editor Kevin O'Brien at  
+1.215.628.4447 or [kobrien@catalystgrp.com](mailto:kobrien@catalystgrp.com)

